UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,545	07/16/2004	Pamela Smith	009974-5028-02	3450

9629   7590   06/15/2007

MORGAN LEWIS & BOCKIUS LLP
1111 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20004

EXAMINER
LIU, LIN

ART UNIT	PAPER NUMBER
2145	

MAIL DATE	DELIVERY MODE
06/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/699,545	SMITH, PAMELA
	Examiner	**Art Unit**
	Lin Liu	2145

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07/16/2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>76-91</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>76-91</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 November 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This office action is responsive to communications filed on 07/16/2004.

Claims 1-75 are cancelled and claims 76-91 are pending and have been examined.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

    1.   Determining the scope and contents of the prior art.
    2.   Ascertaining the differences between the prior art and the claims at issue.
    3.   Resolving the level of ordinary skill in the pertinent art.
    4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

4.   Claims 76-79, and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Toyouchi et al. (Patent no.: 6,006,251)** in view of **Brendel et al. (Patent no.:**

5,774,660).

With respect to **claim 76,** Toyouchi teaches a computer network system

(Toyouchi, fig. 1) supporting multiple workstations having browser based

communication software, said computer network system comprising:

a Web Farm (Toyouchi, fig. 1, and col. 6, lines 17-20, web farm is comprised of service providing computer 101 and information providing computers 21-2n), said server including plural communication ports to permit data transfer (Toyouchi, col. 7, lines 7-38, noted that the request is initiated from information acquiring computers for transferring of data from information providing computer to service providing computer and eventually send to information acquiring computers) along communication links between one or more servers in said Web Farm and said plural browser based workstations (Toyouchi, fig. 1 and col. 38, noted that information acquiring computers 11-1m, is browser based), said communication links permitting data transfer of select Web-based data to said workstations (Toyouchi, col. 7, line 28-38, noted that the service providing computer of the web farm forwards the data to information acquiring computers) in accordance with either HTTP or TCP/IP communication protocols (Toyouchi, col. 18, lines 51-61 and col. 39, lines6-16, noted that the message format of the ip-address+port transmitted/received between the information acquiring computers and the service providing computer);

at least a communication link between said Web Farm and the Internet (Toyouchi, fig. 1, public line network 1), wherein at least one server in said Web Farm includes a local cache (Toyouchi, fig. 2, and col. 24, lines 29, cache region 58) for storing data received with said communication link from one or more remote servers connected to the Internet (Toyouchi, col. 24, lines 27-31, noted that the information received from the information providing computers are stored in cache region 58);

said workstations further comprising a second local cache for storing data received from said workstation communication link to said Web Farm (Toyouchi, fig. 57 and col. 50, lines 6-10, noted the cache region 58 stores the information received from the information providing computers [parts of the web farm]);

said system further comprising programming to control transfer of data between the Internet and the Web Farm (Toyouchi, fig. 2 and col. 7, lines 41-42, management unit 3 of the service providing computer is connected to the public network and receives message transmitted from the information providing computers), and further controlling data transfer between said Web Farm and each of said workstations in accordance with a selective algorithm to insure updating of frequently changing data on said remote servers and data frequently requested by said browser based workstations (Toyouchi, col. 11, line 61 to col. 12 line 12, noted that the information is updated regularly in service providing computer).

However, Toyouchi does not explicitly teach a high speed communication link between the web farm and the internet.

In the same field of endeavor, Brendel teaches a high speed communication link between the web farm and the internet (Fig. 19, T1/T3 connection 142 and 148 from the web farm of the severs to the internet).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the T1/T3 high speed communication links as taught by Brendel in Toyouchi's invention in order to increase the bandwidth which is needed for larger web sites (Brendel col. 18, lines 58-60).

With respect to **claim 77,** Toyouchi teaches a system that includes 2 management tables in the information acquiring computer, which store the name and address of the information providing computer (Toyouchi, col. 46 line 66 to col. 47 line 1), and timer of every update information from the information providing computers (Toyouchi, col. 46, lines 60-65). However, Toyouchi does not explicitly teach that these management tables are stored in the cache region.

A person of ordinary skill in the art at the time of the invention would have made the modification to the Toyouchi's invention to store the management table in the cache region with the motivation of having fast data access.

With respect to **claim 78,** Toyouchi teaches the system of claim 76 further comprising programming to ascertain a frequency of access of data stored at said Web Farm by said workstation (Toyouchi, col. 10, lines 8-12, noted the statistic information shows the utilization frequency of data access).

With respect to **claim 79,** Toyouchi teaches the system of claim 78 further comprising programming for ascertaining a time period between last update times for data in said second cache (Toyouchi, col. 46, lines 60-65, noted the management table stores a timer of every update information from the information providing computers and corresponding data in said Web Farm cache (Toyouchi, col. 17, lines 27-35), and updating said data on said workstation cache when said period exceeds a select limit (Toyouchi, col. 50, lines 20-24).

With respect to **claim 85,** Toyouchi, teaches a method of storing the IP address of the information acquiring computer in the message header transmitted/received

between the information acquiring computers and the service providing computer

(Toyouchi, col. 39, lines 6-16). However, he does not explicitly teach storing the IP

address of the information acquiring computer in the registry.

Since a registry is an inherent feature in computer, therefore, it would have been

obvious to a person of ordinary skill in the art at the time of the invention was to make

the modification to Toyouchi's invention to store the IP addresses of the information

acquiring computers in the registry of the service providing computer with the motivation

in keeping track of the change of the IP addresses of the information acquiring

computers.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

6. .   Claims 80-84, and 86-91 are rejected under 35 U.S.C. 102(e) as being

anticipated by **Toyouchi et al. (Patent no.: 6,006,251).**

With respect to **claim 80,** Toyouchi teaches a system (Toyouchi, fig. 1) for

distributing financial related data in support of brokerage and consulting functions, said

system including:

plural, browser based workstations (Toyouchi, fig. 1 and col. 38, noted that

information acquiring computers 11-1m, are browser based) each providing a local

workstation data cache to said browser for storing financial business related data

(Toyouchi, col. 35, line 15, and col. 50, lines 6-10, noted that the information providing

computers have data associated with stock price information, and the information

acquiring computers receive and store the information in the cache region from the

information providing computers), said data having time based marker to indicate an

aging of said data (Toyouchi, col. 50, lines 20-24, noted that information stored in the

cache expires);

a Web Farm (Toyouchi, fig. 1, and col. 6, lines 17-20, web farm is comprised of

service providing computer 101 and information providing computers 21-2n) comprising

at least one local server (Toyouchi, fig. 1, and col. 6, lines 17-20, service providing

computer 101) for connecting to plural remote servers across the Internet (Toyouchi,

col. 7, lines 41-44, noted that the service providing computer is connected to information

providing computers via public network 1), said Web Farm further comprising a Web

Farm data cache (Toyouchi, fig. 2, and col. 24, lines 29, cache region 58), for storing

financial data (Toyouchi, col. 35, line 15, and col. 24, lines 6-10, noted that the

information providing computers have data associated with stock price information, and

the service providing computers receive and store the information in the cache region

from the information providing computers), said Web Farm further comprising

programming for requesting and retrieving data from said remote servers in response to

user requests entered at said workstations (Toyouchi, col. 7, lines 7-38 and col. 8, lines

4-8, noted that the end user makes request from the information acquiring computer to

the service providing computer for information, wherein the service providing computer

forwards the request to the information providing computers, and the determined data is

sent from information providing computer to the service providing computer) or

automated requests generated in accordance with a frequency that said data is requested by said users.

With respect to **claim 81,** Toyouchi teaches the system of claim 80 further comprising programming to confirm accuracy and current availability of a URL associated with stored or requested data (Toyouchi, fig. 13, and col. 17 line 52 to col. 18, line 16).

With respect to **claim 82,** Toyouchi teaches the system of claim 80 further comprising programming for storing in said Web Farm cache data having organizational value (Toyouchi, fig. 16, terminal function code 95) and associated use by plural workstations (Toyouchi, col. 18, line 63-65, it is used to define the functions of the information acquiring computers).

With respect to **claim 83,** Toyouchi teaches the system of claim 80 wherein said data comprises stock price information (Toyouchi, col. 35, line 15, noted that the information providing computers have data associated with stock price information).

With respect to **claim 84,** Toyouchi teaches the system of claim 80 further comprising programming on said plural workstations to first query workstation cache for selected data (Toyouchi, col. 50, lines 10-17, noted that the information acquiring computer derives the information from the cache region if the requested data is found in cache) and only if said selected data is not found in said workstation cache or has aged beyond a pre-sent limit (Toyouchi, col. 50, lines 20-24, noted that when the valid term of the data expires, the newly updated data from the service providing computer

overwrites the stored data), query said Web Farm cache for said selected data for

transfer to said workstation cache.

With respect to **claim 86,** Toyouchi teaches a data processing method for use in

support of brokerage and/or financial consulting services including the steps of:

a. storing in a Web Farm (Toyouchi, fig. 1, and col. 6, lines 17-20, web farm is

comprised of service providing computer 101 and information providing computers 21-

2n), financial related data in a Web Farm cache (Toyouchi, col. 35, line 15, and col. 50,

lines 6-10, noted that the information providing computers have data associated with

stock price information, and the information acquiring computers receive and store the

information in the cache region from the information providing computers);

b. entering commands in plural workstations (Toyouchi, col. 7, lines 7-38 and col.

8, lines 4-8, noted that the end user makes request from the information acquiring

computers), requesting financial related data for use by operators of said workstations

(Toyouchi, col. 35, line 15, and col. 50, lines 6-10, noted that the information providing

computers have data associated with stock price information, and the information

acquiring computers receive and store the information in the cache region from the

information providing computers);

c. retrieving, in response to said entered commands, said financial data

corresponding to said commands from a workstation cache (Toyouchi, col. 35, line 15,

and col. 50, lines 6-10, noted that the information providing computers have data

associated with stock price information, and the information acquiring computers

receive and store the information in the cache region from the information providing computers), if available;

d. retrieving, in response to said entered commands, said financial related data stored in said Web Farm corresponding to said commands (Toyouchi, col. 35, line 15, and col. 24, lines 6-10, noted that the information providing computers have data associated with stock price information, and the service providing computers receive and store the information in the cache region from the information providing computers), if available and not available in said workstation cache; and

e. retrieving, in response to said entered commands, said financial related data stored on one or more remote servers (Toyouchi, col. 35, line 15, col. 24, lines 6-10, and col. 50, lines 6-10, noted that the information providing computers have data associated with stock price information, and the service providing computers receive and store the information in the cache region from the information providing computers and forwards this data information to information acquiring computers), if said financial related data is not available in either said workstation or Web Farm cache.

With respect to **claim 87,** Toyouchi teaches the method of claim 86 further comprising the steps of measuring frequency of requests (Toyouchi, col. 10, lines 8-12, noted the statistic information shows the utilization frequency of data access) for select data in said commands and automatically updating said select data that is frequently requested and storing said updates in said Web Farm cache (Toyouchi, col. 24, 41-49, noted that when the valid term of the data expires, the newly updated data from the information providing computers overwrites the stored data).

With respect to **claim 88,** Toyouchi teaches the method of claim 87 wherein said data includes stock price (Toyouchi, col. 35, line 15, noted that the information providing computers have data associated with stock price information) and transaction information (Toyouchi, col. 24, lines 56-60).

With respect to **claim 89,** Toyouchi teaches the method of claim 87 further comprising the step of removing data from said workstation cache that is redundant with data stored in said Web Farm cache (Toyouchi, col. 50, lines 20-24, noted that the expired data is erased from the cache of information acquiring computer).

With respect to **claim 90,** Toyouchi teaches the method of claim 87 further comprising the step of automatically updating data stored in said Web Farm cache with corresponding newer data from remote servers, if said Web Farm data ages beyond a pre-set limit (Toyouchi, col. 24, 41-49, noted that when the valid term of the data expires, the newly updated data from the information providing computers overwrites the stored data).

With respect to **claim 91,** Toyouchi, teaches a method of storing the IP address of the information acquiring computer in the message header transmitted/received between the information acquiring computers and the service providing computer (Toyouchi, col. 39, lines 6-16). However, he does not explicitly teach storing the IP address of the information acquiring computer in the registry.

Since a registry is an inherent feature in computer, therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was to make the modification to Toyouchi's invention to store the IP addresses of the information

acquiring computers in the registry of the service providing computer with the motivation

in keeping track of the change of the IP addresses of the information acquiring

computers.

Response to Arguments

7.   Applicant's arguments with respect to claims 76-90 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

- Chow et al. (Patent no.: US 6,029,175) discloses automatic retrieval of changed

  files by a network software agent.

- Burns et al. (Patent no.: US 6,324,182 B1) discloses a pull based, intelligent

  caching method.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lin Liu whose telephone number is (571) 270-1447.

The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L. Liu
06/07/2007

JASON CARDONE
SUPERVISORY PATENT EXAMINER